Frankly Speaking

Transit in Post-War Planning

ONE of the most interesting developments to come out of the annual meeting of the Institute of Traffic Engineers was the increasing concern over the place of public transit in the transportation picture. On first consideration it might be felt that this is only an attempt to recognize transit for the heroic job that has been done in providing needed transportation for those whose tires were stolen by the Japs in their early conquests in the South Pacific.

There are even better and more stable reasons why traffic engineers recognize the place of transit. First, cordon counts in cities showed during the 30's when public transit was generally at its low point that, taking the country as a whole, approximately half of the persons entering business districts used that form of transportation. This ratio was much higher in some of the larger metropolitan areas.

Second, in attempting to provide for the greatest efficiency of movement on our street systems, we had discovered that you cannot devote attention to moving one type of traffic and disregard other types. The very physical characteristics of the majority of streets made this axiomatic even to one who might have no interest in the great per cent of the population served by public carriers.

And yet, the traffic engineer who advocated the removal of a few vehicle parking spaces in order to provide space for the proper loading and unloading of street cars or buses was often subject to severe criticism.

In this issue of TRAFFIC ENGINEERING appears a timely discussion of transit's place in post-war urban transportation by John Ecker, which contains some excellent food for thought, and which helps to drive home the important point that I want to make; that as we progress through the war period and plan for post-war transportation we must consider the transportation needs of the total public, must plan to move *all* traffic efficiently and safely.

T. J. Sebum

Vice-President, I.T.E.

VOLUME XV DECEMBER, 1944 NUMBER 3

Transit's Place in Post-War Urban Transportation

by JOHN ECKER

Postwar Urban Planning

IN PLANNING for the post-war period there is a great need for consideration and study of urban development. Estimates and individual surveys clearly indicate that the drastic shifts in population caused by migration of workers to swollen centers of production will, in the majority of cases, result in a permanent shift to urban areas.

Data assembled by the Assistant Director of the Bureau of Census show that of the wartime cities studied, about 38% will retain their population gains. In only 8% of the cities studied do the figures show that the growth may be transient. Those that lost population during the war or gained very little, but in the light of past performance may be expected to come back or remain relatively stable in the post-war period, constitute approximately 54% of the cities studied. Individual surveys evidence the desire of a majority of workers to remain in their new surroundings.

It is not only the shift of population to urban centers, but also the shift within the respective centers themselves with which planning officials and traffic engineers will be vitally concerned. While there appears to be a definite and permanent shift toward urban population centers, the present distribution of population within individual centers will undoubtedly change rapidly in the post-war period with the relaxation of necessary wartime restrictions. Improvisations in housing, working conditions, and transportation among other problems have been necessary during the war, but they cannot and will not be tolerated after the war. Consequently, properly planned and integrated facilities in the broadest sense will have to be provided for these growing neighborhoods at the lowest cost economically justified by the demand. Blighted areas must be redeveloped and present acceptable neighborhoods and centers stabilized. The growth and activity of every urban center are directly dependent upon the efficacy of its circulatory system including mass transportation as well as private automobiles.

Relative Use of Transit Facilities

Too little recognition has been given these factors by both city planners and municipal officials. Too many traffic engineers have been primarily concerned with detail problems and have missed seeing the forest because of the trees. It is encouraging that during the stress of war the more vital aspects of public transportation and its essentiality to the community have been better and more widely understood. The lessons learned during wartime concerning the essentiality of public transit's place in larger urban communities must not be forgotten.

John Ecker (Assoc.) is Director of Research and Planning, Capital Transit Company, Washington, D. C. Data on Washington, D. C., growth were secured from "Population and Business Prospects for Metropolitan Washington by the Postwar Planning Committee, Washington Board of Trade, in cooperation with the Committee for Economic Development."

Transit does not have the glamour, luxury, and some of the conveniences of the passenger automobile but it is essential to the life and development of the larger cities and is relied upon and regularly used by a majority of the population.

The following table (source, American Transit Association) illustrates the relative use of mass transit in cities of various size groups both before and during the war.

The Nation's Capital, in many respects, differs greatly from industrial centers in the United States; yet many of the transportation problems with which Washington will be faced after the war are similar to those faced by other communities. A general analysis of these problems is outlined herein, as being pertinent to those that most cities will face in one form or another post-war.

Washington Population and Employment Changes

Metropolitan Washington entered the Defense and War Period prior to 1940 after a decade of phenomenal growth in the Thirties of approximately 44%. In this respect it was unlike other cities in the country. During the war the population swelled to a maximum estimated at 1,280,000 or a further increase over 1940 of approximately 32%. After the war it is estimated there may be a temporary recession in population but that normal growth will be resumed thereafter. By 1955 population may be one and a half million. During the pre-war and war periods described above Federal civilian employees in the executive branch making up the largest single group of workers increased approximately 97% and 121%, respectively. While Federal civilian employees in the executive branch may be reduced by approximately one third after the war, the past normal ratio of other workers to Federal employees of the executive branch indicates that total workers in the area should not be materially reduced and by the fifth post-war year would be as high as during the war. This maintaining of over-all employment levels is due to the fact that the services and trades have not been able to keep apace with rapid government employment growth demands in the past.

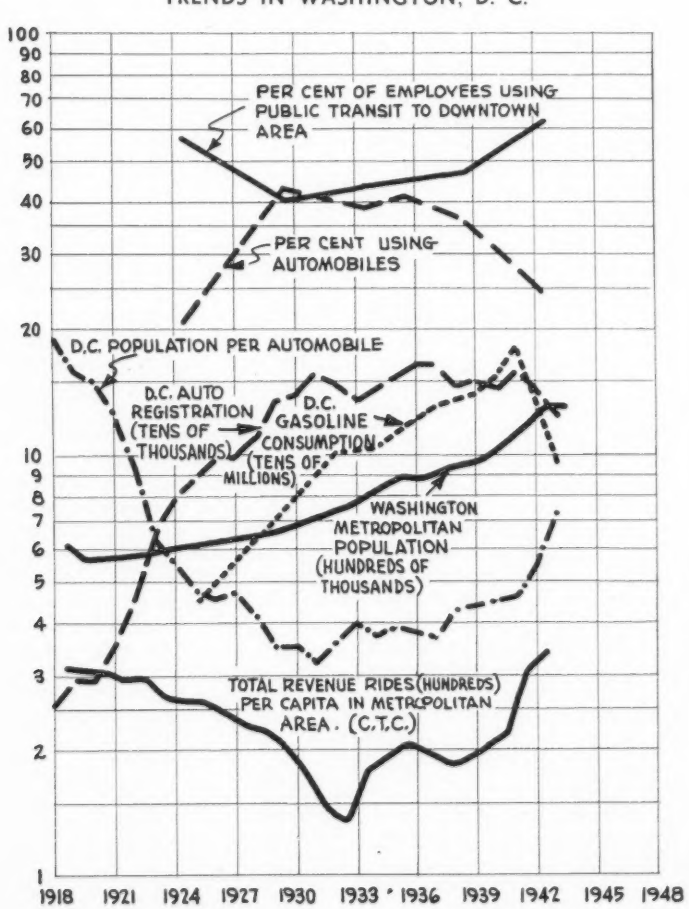
A reduction in Federal employment, proportional increase in other employment, and the proposal of further decentralization of new permanent government buildings to replace present temporary buildings are, other factors remaining the same, going to reduce the peak hour traffic congestion. Furthermore, there has been in Washington during the war, approximately a ten per cent increase in working population as a proportion of the total population. It is expected that with the resumption of normal times the pre-war ratio of working population will be reestablished. Undoubtedly large centers of war production will experience the same loss in proportion of working population. There is also the probability that a smaller proportion of workers will be located in the key industrial centers. Factors such as

Urban Population By Groups	Total U. S. Population In Groups		Ratio of Daily Transit Riders to Urban Population	
	Pre-War	1943	Pre-War	1943
25,000- 50,000	6,400,000	7,400,000	20%	34%
50,000- 100,000	6,500,000	7,300,000	28%	78%
100,000- 250,000	7,500,000	7,700,000	38%	105%
250,000- 500,000	8,000,000	6,600,000	48%	137%
500,000-1,000,000	5,800,000	7,800,000	72%	145%
Over 1,000,000	15,000,000	15,900,000	98%	152%

these should be carefully studied and thoroughly evaluated. Particularly, they have a direct bearing on rush hour period traffic facilities.

Decentralization's Effect

Practically every large urban community is going to be faced with decentralization problems of various types such as residential and retail trades and industries. Among those vitally affecting the entire transportation circulatory system is residential decentralization. It may be possible to control this trend to a greater or lesser extent although it should not be inferred that the movement is not without its advantages. A full appraisal of the advantages and the problems involved should be made. In a number of cases, uncontrolled decentralization



has not only been costly to the community in the development of new roads and facilities but has also left in its wake abandoned areas which are more accessible to places of work and which might readily, with proper planning, be rehabilitated.

Washington is going to be faced with problems of this kind after the war. The District of Columbia reached a maximum portion of metropolitan Washington in 1920 when it comprised approximately 76% of the population. The percentage had been steadily increasing prior to that date, but with the advent of the automobile in substantial numbers in 1920 the trend was reversed and has been constantly decreasing since then until the District of Columbia now has approximately 67% of the total. In 1955, it is estimated that it will approximate 63% of the total. The net result of this shift is a demand for extended roads from suburban areas to the working districts and shopping centers which in Washington are primarily confined to the central areas of governmental buildings. With some minor exceptions, these major employment areas are not greatly decentralized at this time and never will be to the extent of industrial centers in some manufacturing communities. Consequently, a decided shift of population in Washington to the suburban communities materially affects transportation to and from work. This involves street, highway and transit facilities and also complicates mass transportation problems. Unfortunately these facilities have to be designed for maximum capacity during relatively short peak periods and lie comparatively idle the remainder of the day, carrying heavy fixed charges as a liability against the entire community. Problems of rendering adequate mass transit attractive to the public, within reasonable walking distance and with the frequency of service desired by the patrons are tremendously magnified. Many times because of a flat fare, it is impossible to adjust the fare to the added length of passage. As the service becomes less accessible and less frequent, even though "policy headways" and routes not justified by the traffic demands are instituted, a vicious cycle is induced and patronage correspondingly drops off.

Attitude Toward Transit Industry

During the war, because of lack of gasoline, rubber, manpower, repair parts, and automobiles, primary reliance has been laid on public transit and it is universally agreed that transit has done, on the whole, an excellent job. Prior to the war, in many quarters the essentiality of its service was not fully appreciated. This understanding has been partially corrected as a result of wartime experience. On the other hand in many communities transit properties, largely because of depleted revenues, entered the war period with inadequate and obsolete equipment. Even under such conditions the public has been tolerant and generally recognizes the job done under trying circumstances. Indications are that many transit properties will hold a large portion of the newly won customers. It is to be hoped for the basic good of the community that this will be true and that civic leaders, the public and municipal officials will not forget transit's essential place in peacetime community planning and welfare. With such a sympathetic attitude there should be no excuse for failure by progressive transit management and leadership.

Traffic Trends in Washington

It is interesting to review Washington's pre-war and wartime experience regarding relative use of automobiles and mass transit as presented on the accompanying chart. Transit passengers per capita decreased markedly from a peak after World War I to a

low in the depression in 1933. During this same period population per passenger automobile decreased sharply but began to flatten out at the beginning of the depression. In this period the per cent of workers using mass transit decreased and correspondingly those using automobiles increased. After the depression, these trends were radically reversed: revenue passengers per capita using transit increased, per cent of workers using transit increased, population per passenger automobile increased, and per cent of workers using automobiles decreased. The total number of passenger automobiles registered in the District of Columbia has remained fairly constant. Since the depression, gasoline consumption continued upward indicating a much higher average annual mileage per automobile. These trends were apparent from the depression to the beginning of the Defense Program in 1940. Inasmuch as gasoline consumption has continued markedly upward after the depression and automobile registration has remained fairly constant, while other factors, such as population and transit riders have increased substantially, it would appear that the use of automobiles has been devoted to other than routine necessity rides. Undoubtedly with Washington's accelerated growth after the New Deal in 1933 a greater reliance has been placed on mass transit.

Since the war, the trends evidenced prior to the Defense Program have been in effect but markedly accentuated. While the attached chart shows population per passenger automobile for only the District of Columbia, supplementary studies up to 1941 indicate the same general trend for metropolitan Washington. It may naturally be inferred that with the resumption of normal times there will be some transfer in patronage from mass transit to the use of automobiles, but it is expected that much of the new patronage will be retained and the general pre-war trends resumed. Habits and experience acquired during the war and trends which were evident before the war lead to the conclusion that there undoubtedly will be greater reliance on mass transit facilities post-war than pre-war. The use of transit will be affected by the cost and availability of automobiles and facilities for their use, as well as by the relative attractiveness of public transportation in the post-war era. Nevertheless, in any case, these definite trends should be recognized and general planning for transportation facilities for transit services as well as automobiles patterned accordingly.

Decreased Off-Peak Travel

In connection with the use of mass transit facilities there seems to have been, before the war, a condition which has been more marked during the war of a greater increase in per capita riding during the peak periods to and from place of work and the entire system use, than midday riding to the downtown shopping center. Unfortunately a breakdown by periods of the day for automobile cordon counts to downtown area is not available and it is impossible to definitely ascertain whether the falling off in relative midday use of transit service to the downtown area has been offset by greater use of automobiles. Inasmuch as automobile registrations per capita in the District have been decreasing, there are good grounds for presuming that transportation via private automobile to the central area during midday has not increased sufficiently to balance the relative drop in use of transit service in those hours. If this is the case, then there is a decentralization trend for shoppers away from the downtown area. Small neighborhood shopping centers have developed in Washington like some other cities. Some of the larger retail department stores have

located branches outside the central area, and it is understood others are planning to do likewise. On the other hand Washington's downtown shopping center, unlike many industrial cities, is located adjacent to its principal place of employment and is more stabilized in that respect. Nevertheless this trend, if accentuated, can do much to affect property values in that area and should be fully appreciated.

Washington's municipal officials are appreciative of the significance of mitigating the congestion which was so apparent in the downtown area before the war. Studies are being made by them and by the local transit company not only to eliminate this congestion but also to improve operating speeds both within and outside the central area for both automobile and mass transit services.

Transit's Place in Postwar Urban Transportation

The previous illustrations make it evident that large urban communities facing these facts and with wartime experience behind them should give careful consideration to transit's place in urban transportation. It should be emphasized again that there will be greater reliance on mass transit in most larger urban centers post-war than pre-war, and it is advantageous to the interests of a large proportion of the population that these essential services be fully appreciated in the development of plans for improvement of transportation facilities. While improvements are necessary for expediting automobile traffic, it is believed that these should be carefully analyzed with full consideration of their economic justification on the city as a whole. However, it is physically impossible to provide complete facilities for every individual motorist for transportation from residential to employment areas. Transit, making a much more efficient use of street space at an over-all less charge to the community, is the logical solution to many of these problems. The proper application of transit in a community can avoid the unwarranted expenditure of large sums of the public's money. It is too easy to catch the public's imagination with big sensational physical projects all of which may not be economically sound. It is the duty of those responsible and familiar with the development of these projects to protect the public's financial interest.

Many of the urban projects are the result of peak hour capacity demand. This fact should be thoroughly appreciated and the savings and economic justification based thereon. Too often authorities have been prone to allocate savings of such projects on all day use when actually little or no improvement results during other than rush periods of the day.

While each city is faced with its particular problems, yet an over-all policy must be reached as to the treatment of the general transportation plan before any of the major projects are embarked upon. It is a natural incentive to make principal use of transit in rush periods. It should, however, be thoroughly realized in the development of these policies that a well managed transit facility cannot give attractive and economical service to the public unless reasonable use is made of transit services in other periods of the day. Transit's appropriate place in the master transportation plan must be fully determined.

Post-War—New York City is prepared to carry out a 400 million dollar construction program in 1945 if Congress acts at once to meet half the cost, 30 million to be devoted to federal and state aided highway work.

Scope of Traffic Engineering Defined

The following is a final draft of the statement of traffic engineering functions as developed by the Yale-I.T.E. Seminar, August 28-29, 1944. In the September issue, page 358, appears a story about the two-day joint meeting when it was decided to develop this statement, as an aid to those within as well as outside of the profession in understanding the aims of traffic engineering.

EXPECTED increases in traffic flow and contemplated vast expenditures for streets, highways, and parking terminals, make it essential that all possible skill be utilized to improve their planning, design, and use so as to insure maximum transportation value with reduction of congestion and accident.

To obtain this maximum value, greater considerations must also be given to use of existing streets and highways. Added traffic problems will arise with new expressways through metropolitan areas concentrating heavy volumes of traffic which must be collected and distributed on existing facilities.

It is these problems that demand scientific treatment. Numerous scientific procedures have already proved their worth; still more remain to be developed. For example, greater knowledge of practices of road users and operating characteristics of vehicles is necessary.

Patterns of development in metropolitan areas, indeed the very health of the future city, largely depend on how the traffic "life-blood" of the city flows, and this health will depend on the application of the highest traffic engineering skills.

The following functions are seen to comprise the scope of traffic engineering (state and city administrators will recognize that these functions are among their responsibilities):

1. Collection and Analysis of Factual Data—The collection and analysis of all physical and economic data needed to measure existing, and to estimate future, street and highway traffic characteristics such as: (a) Origin and Destination; (b) Volumes; (c) Speeds; (d) Accidents; (e) Congestion; (f) Parking; etc.

2. Traffic Planning—The preparation and submission to proper authorities of traffic plans and recommendations, based on analysis of comprehensive data, for the proper location, function, and operation of routes and terminals. Highway transportation is a most important phase of comprehensive plans for any area—it is intimately related to such things as land use and population distribution. Traffic data properly applied are necessary to justify the need and location of expressways, new major streets, and parking areas.

3. Traffic Design—The interpretation of traffic performances and needs in respect to design for the development of efficient roads, interchanges, parking terminals and other traffic handling facilities. Traffic research is already providing factual data applicable in the improvement of design practices. Street and highway officials find that this type of data can be successfully applied. One valuable contribution, for example, has been the

studies showing effects of alinement on roadway capacity. Similar studies have assisted in the formulation of geometric design policies in terms of traffic demands. Experience in redesign demonstrates that there is need for a wider application of traffic engineering principles.

4. Traffic Operation Measures—The application of uniform regulatory measures to new as well as existing routes and terminals is vitally necessary for safe, convenient and economic highway transportation. The effectiveness of these measures depends upon how well engineering techniques, consistent with economic, legislative, and enforcement limitations, are applied. One-way, stop, signals, turning, parking, speed and similar regulations should not be arbitrarily applied and should be imposed only after engineering study and analysis of traffic demands and characteristics.

South Bend Develops Unique Pedestrian Signals

by E. H. MILLER

SOUTH BEND, INDIANA, announces a plan to install pedestrian traffic signals in conjunction with standard vehicular signals in South Bend. The new signals are to be installed as a part of a modernizing program including twenty-nine intersections in the central part of the city.

A unique feature of the plan is the salvage of practically all signal equipment now in use in the area. At present there are but two lenses per signal face. These are to be mounted below the new lenses to form a five lens face, the upper three for vehicle control and the lower two for pedestrian control.

The advantages of the use of pedestrian signals and their effectiveness have not yet been fully established. Several attempts have been made to set up standards for their design and use. None has been so acceptable that all other modifications have been discarded.

E. H. Miller is City Traffic Engineer of South Bend, Indiana, and Junior member of the Institute of Traffic Engineers.

Other Cities Surveyed

The City of South Bend set upon the task of determining what features of design have so far been most widely applied. Questionnaires were sent to thirty-two cities now using pedestrian control signals. Twenty-nine replied. The results of the questionnaire indicated the most frequent wording was a combination of "WALK" and "WAIT". One city reported the use of "WALK" and "DON'T WALK" and twelve cities reported the use of "WALK" only. South Bend decided to join the ranks of those cities using the words "WALK" and "WAIT".

There was a greater variety of color schemes in the group reporting. The most frequently used was a combination of clear letters on a black background for both wordings. The next most frequently used combination was blue on a black background. South Bend will probably have clear letters on a black background for both words.

There is to be a slight variation of the South Bend "WAIT" signal from those described by the reports. There is to be a 3/16 inch circle around the edge. This will add to the target value of the "WAIT" lens and will also aid those who are unable to read to distinguish it from the "WALK" signal. In making the selection of wordings and colors, every effort was made to overcome, or at least to lessen to a minimum, the possibility of confusion to the motorist of the indications shown by the entire signal face.

Summary of Answers to Questionnaire on Special Pedestrian Signals

Type of Pedestrian Signals in Use

14 Cities report use of WALK and WAIT.

12 Cities report use of WALK only.

1 City reports use of WALK and WAIT neon.

1 City reports use of WALK and DON'T WALK neon.

1 City reports control of pedestrians by combination of regular traffic signal colors.

Color Used in 14 Cities With WALK and WAIT

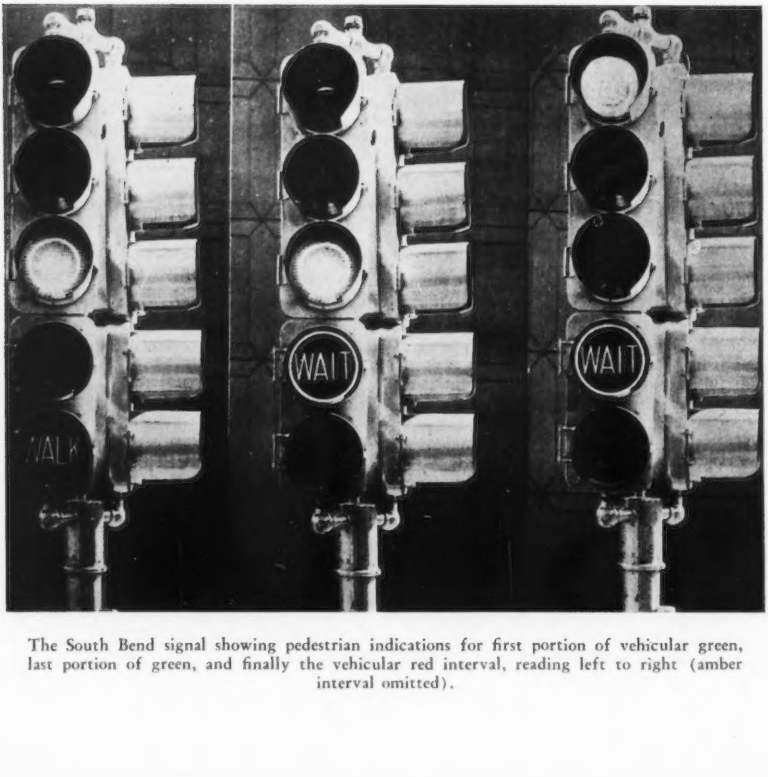
6 Cities use dark background with clear WALK and WAIT.

2 Cities use dark background with blue WALK and WAIT.

1 City uses dark background with blue WALK and red WAIT.

1 City uses dark background with green WALK and amber WAIT.

1 City uses dark background with clear WALK and red WAIT.



The South Bend signal showing pedestrian indications for first portion of vehicular green, last portion of green, and finally the vehicular red interval, reading left to right (amber interval omitted).

1 City uses dark background with green WALK and red STOP on dark background.
1 City uses green for WALK with GO and red for WAIT with STOP.
1 City failed to report colors used.

12 Cities with WALK Only

7 Cities use dark background with clear WALK.
3 Cities use dark background with blue WALK.
1 City uses dark background with amber WALK.
1 City uses dark background with green WALK.

Miscellaneous Combinations

1 City uses green neon WALK and red neon WAIT.
1 City uses red WALK and red DON'T WALK.
1 City uses red and yellow WALK and red, yellow or green alone for WAIT.

UNIFORM PEDESTRIAN REGULATIONS AND ENFORCEMENT

by ARTHUR E. MILLER

In my opinion, many cities have approached the problem in a sensible and reasonable manner from an enforcement standpoint. They pass a reasonable law or regulation; then all the publicity possible is given the program, the reason why, and so on. After this, a certain period is set aside for real personal education, such as passing out safety pamphlets, warning tickets by the police, by posters, and by stencils on the sidewalk and street. After this period actual enforcement begins and this is directed to the flagrant violators.

In the first place, every possible engineering aid or provision should be provided. That is, signal lights for the benefit and protection of the pedestrian. All conflicts between motorists and pedestrians at signalized intersections should be eliminated insofar as possible. Pedestrians should be favored and protected if they are complying with the regulations, such as right or left turns by motorists across their path. Rigid enforcement must be had in this respect. Safety zones or islands should be provided in wide streets; barricades at "offset" intersections and where there is a large left turning movement by vehicles.

All cities, both large and small, should have uniform pedestrian control regulation, and uniform enforcement. This would make it easier for all law enforcement agencies, as there could be no valid excuse for not knowing about the law.

When it is realized that about two out of every three persons killed in cities are pedestrians, it is time we did something about their protection.

Arthur E. Miller, author of this article, is Inspector in Charge of Traffic, Metropolitan Police Department, Washington, D. C.

Petroleum—Passenger cars consume only about 15 per cent of the Nation's petroleum supply under wartime conditions according to the American Automobile Association. This is second only to percentage used by Armed Forces, 32 per cent.—*Highway Research Abstracts.*

Simplifying Traffic Lane Delineation

DURING the era of the surrey with the fringe on top, with its one or 2 horsepower locomotion, delineation and making of traffic lanes were unnecessary. This, of course, was due to the prevailing slow speeds, and small volumes of traffic, coupled with the mode of living of the period.

With the advent of the automobile and its spectacular increase as a means of transportation, many problems arose that required serious consideration by traffic engineers and other officials responsible for keeping the roadways safe and efficient. Added to this increase of use, other factors had to be contended with such as increased horsepower and increased speeds.

One method of reducing the problem of accident hazard on wide roadways, at curves, and at wide complicated intersections was to provide pavement guide lines.

In the past the Chicago Park District has experimented with such methods as mathematical calculations, snow patterns, use of flour or sand or other like materials to determine traffic patterns. While some of these methods had merit, it was found that an excessive amount of time was consumed to determine the proper alignment or channelization.

A Special Device

In an effort to overcome these limitations, a device was developed by Mr. V. G. Hofer of our Traffic Section that was found particularly useful as a marker in laying out channelization patterns and other complicated road marking work especially at curves.

The device consists of a 5-gallon can with the necessary fittings, a master valve, 4 secondary valves, 4 rubber hose run-offs, and side mount brackets. One end of the run-off is connected to the secondary valve, with the other end fastened to the extremities of the bumper guard by means of a clamp.

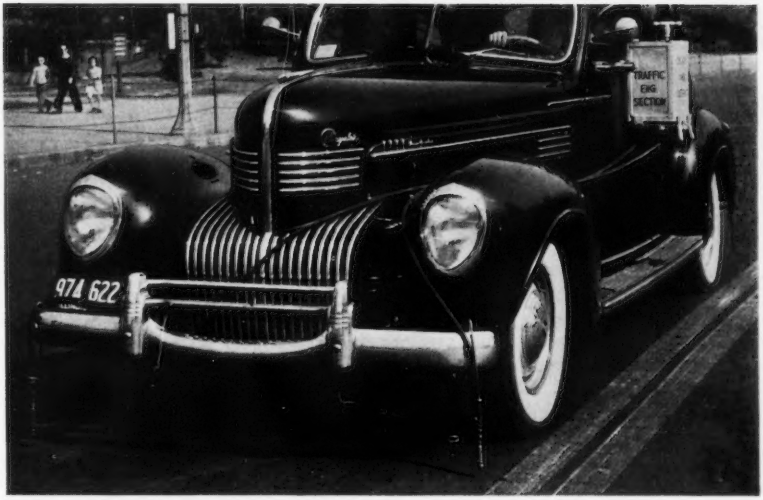
The clamp is made from a ¼″ diameter rod, 24″ long, shaped into a "U". The clamp is then placed over the bumper guard, with the hose run-off held to the clamp by means of two clips.

Water is used as a marking liquid.

The device is mounted on the door of a passenger car or light truck by means of a bolt that has a piece of 1½″ x 3″ flat rolled steel welded on the head of the bolt.

It is very simple to operate. The driver of the vehicle needs only to turn the master valve handle which allows a small amount of water to flow to the secondary valves. The secondary valves in turn are so regulated as to allow the water to drip onto the pavement, thus indicating a definite lane pattern. The road markers measure the lane widths from both sides or on either side of the drippings depending on the physical road condition, then place marking points about 10 feet apart (parallel to drippings), with marking keel and follow up by stomping a smooth chalk line through the points, to serve as a guide line for the machine men.

This article was prepared for TRAFFIC ENGINEERING by the Traffic Section, Engineering Division, Chicago Park District.



The accompanying photograph illustrates the device. The advantages of this device are as follows:

1. It defines lanes, no matter how complicated, describing the normal movements of drivers.
2. It saves considerable time in laying out work, particularly at curves.
3. It reduces traffic delays due to the saving of time in laying out the markings.
4. It acts as a safety device in that smaller areas are closed to traffic and further that workers do not have to cross traffic as often as formerly to check measurements.
5. The cost of the device is negligible.

A 5-gallon can was used in the device illustrated. An old hose from a traffic counter was used although a gas hose would serve the purpose as well. The cost of the other fittings totaled $5.00.

Those interested in building a similar device may obtain a copy of the working drawings by writing to Mr. Otto K. Jelinek, Traffic Engineer, Chicago Park District, 425 East 14th Boulevard, Chicago 5, Illinois.

Automatic Brake—Development of a device which automatically will stop a moving automobile when an object looms before it has been forecast by Kenneth W. Jarvis, Chicago consulting engineer.

Mr. Jarvis told delegates to the seventeenth annual meeting of the Radio Manufacturers Association and the Institute of Radio Engineers that the sound receiving and projecting device would control brakes and gasoline feeding, determine distance to the nearest object before the car, slow the vehicle, or bring it to a complete stop if there was any possibility of a collision.

Parking Problem Goes to the Polls In an Ohio Municipality

by H. G. ECKHARDT

WHAT the small town thinks and does about its local parking problem is not frequently chronicled. The lion's share of discussion on parking seems to be centered about the larger municipality with the result that very often the village problems lie buried in obscurity. This article is an attempt to focus the light of attention on the tempest raised in a small but progressive Ohio village by an effort to correct a manifestly bad parking condition.

Preliminary to the award of a contract for and participation in the cost of the improvement of a local street, the Ohio Department of Highways placed before the Village Council an agreement in which the Council would agree to provide certain alterations in parking practices according to accepted methods. The Council readily approved the agreement and a signed copy was returned to the State.

Center Parking

Among the parking alterations requested was the abolition of parking on an 8-foot strip down through the center of the 80-foot street. This paved strip was originally occupied by an interurban line, abandoned several years ago. Parking in this area, along with 35° angle parking along both curbs, reduced the available width for moving traffic to 38 feet—or two 19-foot roadways. But, maneuvering operations from both the center and the curb parking stalls further reduced the 19-foot lanes so that, in effect, there remained no room for through traffic.

Two weeks after the Council voted to sign the agreement the Council chamber walls bulged with irate merchants who demanded an immediate retraction of the original council action on the expectancy that the removal of center street parking privileges would drive customers away from the retail district. Legislation was introduced at once to recall the former action, but it was not considered an emergency and thus required three readings.

Highway Department Reports

Then the fun began. The Mayor called in the Highway Department's Division Traffic Engineer who delivered a complete and a very carefully prepared report of the situation. Among other data presented was an observation that on one occasion 18 of the 24 center street spaces were occupied by vehicles whose owners locked the cars and stepped on a bus bound for their day's work in a large neighboring city. Through the orderly array of facts presented, the editor of the local newspaper befriended the issue and as evidence, gave front page space to an editorial on the subject.

Merchants Oppose

The merchants, meanwhile, started to organize their opposition and selected an attorney and former mayor to plead their case. One of the first acts was to threaten a referendum if council failed to reverse its original action.

The author (Mem.) is Assistant Chief Engineer, Division of Traffic and Safety, Ohio Department of Highways.

Seeking further expert advice on the question, the Mayor called upon the National Conservation Bureau, the American Automobile Association and the National Safety Council. Representatives of all three organizations recommended the original council action as a sound move. This fell on the deaf ears of the merchant organization. The line still held. Overthrowing a privilege of many years' standing would not be countenanced.

The Referendum

So the referendum petitions were filed and the question placed on the November ballot. Interest ran high and the fury of the issue nearly matched purely political arguments. The Council, in support of its position, distributed a "dodger" which pointed out the advantages to be gained by the elimination of center parking. It went further. It looked down into the taxpayers' pocketbook and placed a monetary consideration squarely before the electors. The last page of this publication is reproduced, in part, as follows:

Are these 24 parking spaces worth about Four Thousand Dollars apiece of the Taxpayers Money?

* * *

If You Wish To Keep Center Parking
VOTE YES

If You Wish To Eliminate Center Parking and Thereby Receive State Aid on Highways In the Village
VOTE NO

Merchants Win

What campaign strategy was employed by the mechants' group is not clear, but it was obviously effective for when the ballots were tabulated the score stood 916 to 785 in favor of retaining the much debated parking practice.

From the foregoing, one can gain a perspective of the importance attached to long established parking practices no matter how illogical they may be. The general improvement to be had by compliance with modern methods of traffic control are evidently crowded out of consideration when the issue is befogged with misguided but intense local opposition.

THE DETROIT TRAFFIC SURVEY

by Lloyd B. Reid

On October 26, 1944 Detroit staged a traffic survey, conducted on an all-out basis insofar as motorists who entered, left, or terminated in the downtown area were concerned. The area was literally filled with 164 police officers and 5,000 Boy Scouts who obtained detailed information of the travel and parking habits of motorists. Such information was necessary for the planning of a loop of expressways around the central business district—a part of a network of expressways now being planned for the city.

Every motorist entering or leaving the area was stopped by a police officer. While he was being stopped, Boy Scouts were tallying him for cordon count data. Wherever and whenever he parked, he was stopped by Boy Scouts who not only recorded the time parked and unparked, but asked several questions for origin and destination data.

Three surveys were conducted on the same day for the 12 hours between 7:00 A.M. to 7:00 P.M.—A Through-Traffic Survey, A Parking Survey, and a Cordon Count.

Through-Traffic Survey

The Through-Traffic Survey was made to determine the portion and routes of traffic travelling through the downtown area. The street system of Detroit is such that a large volume of traffic is forced to travel through this

Lloyd Reid (Mem.) is City Traffic Engineer of Detroit, Michigan.

area. No accurate count has ever been made to determine what portion through traffic is of total traffic. The information is necessary to aid in designing the loop around the area to determine the relative volume that would use the interchanges at the corners of the loop.

Use of Cards

The survey was conducted by traffic police officers who stopped all traffic which entered the downtown area. They handed the motorists a prepunched card on which was coded the location of entry, a 15-minute period of entry, and type of vehicle. Each motorist retained that card until he left the area at which time it was picked up by another officer.

At the 39 streets where traffic entered the cordon area, pre-punched IBM cards were placed in envelopes plainly marked for 15-minute periods. In each envelope were two colored cards, one for passenger vehicles, and one for commercial vehicles. The number of cards assigned to each 15-minute period was determined from analysis of previous cordon counts. At the 38 streets where traffic left the area, officers collected cards and placed them in envelopes according to 15-minute periods.

All the cards which were collected were later punched with the coding of the location and time at which the vehicle left downtown. Analysis of the data indicates that 28,859 vehicles or 35 per cent of the total entering was through traffic. Analysis is now being made to determine the routes followed by through traffic within the area.

Parking Survey

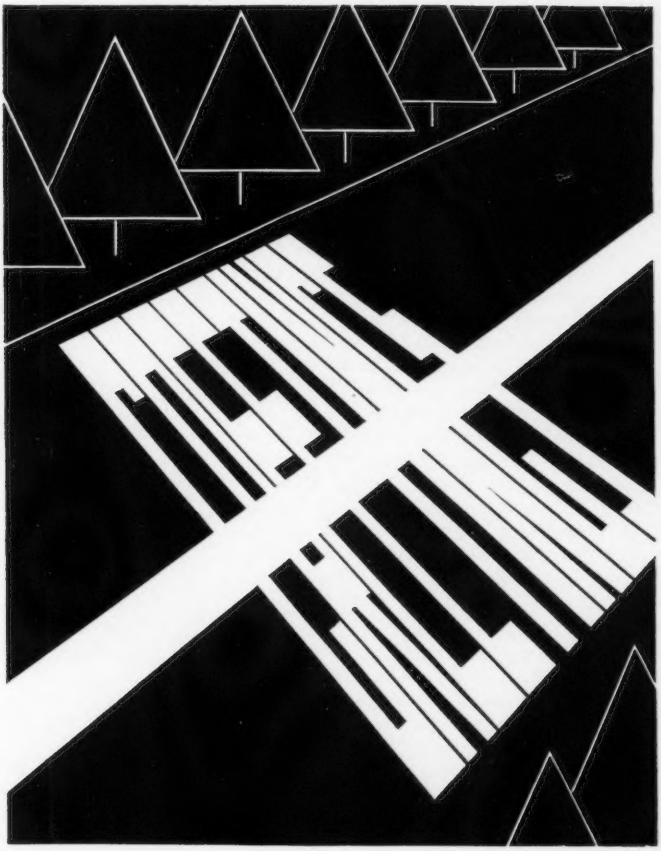
Complete parking information was obtained by Boy Scouts who were assigned to every curb face, parking lot, and parking garage in the entire area. For each parked car they recorded the license number, time in, time out, home postal zone number, purpose of trip downtown, and the motorist's destination in the downtown area. IBM analysis, therefore, will permit an origin and destination study. The survey will obtain detailed data for the study of off-street parking terminals—ideal location as well as economics of parking. It will be possible to determine the parking demand for every square block in the downtown area. Analysis of this survey has not yet been completed.

Boy Scouts Cooperation

The Boy Scouts Council was very happy to cooperate in the survey because of its importance as a civic project as well as for the opportunity to have a large number of Boy Scouts working on one project at one time. Outside of the preparation of the instructions, field forms, manpower requirements, and other details the Boy Scouts Organization undertook the entire job of placing the boys on the assignment and providing for relief and supervision. The City has four Boy Scout Districts, each of which took charge of one-fourth of the downtown area. In each district a headquarters was provided to be a central location for supervisors and the surplus of Scouts who filled in wherever necessary. The organization of this field work was a tremendous job which in actual performance functioned with a minimum amount of difficulty. The accuracy and results of the survey as determined by spot checks throughout the day was much higher than expected.

The Cordon Count was made on the same day as the other two surveys in order to correlate parking and through-traffic information with cordon information. It is expected that in the future it will be much easier to make cordon counts than it will be to obtain the complete coverage which was made in the Through-Traffic and Parking Survey.

PRISMO "LIFELINE"



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Pre-Cast Curb Block Channelizes Traffic

by GEORGE J. FISHER

MOST traffic engineers in order to reduce traffic accidents and congestion have found it desirable to break up the wide and often unused space at existing intersections into channels designed to direct traffic into specific lanes, reduce the number of conflict points to a minimum, and simplify driver decision. This operation calls for raised barriers which may take the form of either solid dividers or islands. In most instances the barriers must be forceful enough to compel the driver to confine his movement to the paved area between them, but they must not be so formidable that they are insurmountable in case of emergency.

Considering these desirable characteristics and searching for an economical barrier that would lend itself to simple installation for any set of physical circumstances, the Ohio Department of Highways through its Division of Traffic and Safety has designed a pre-cast block that has met all the foregoing requirements. This block can be constructed during slack seasons, stored and transported easily when the need arises.

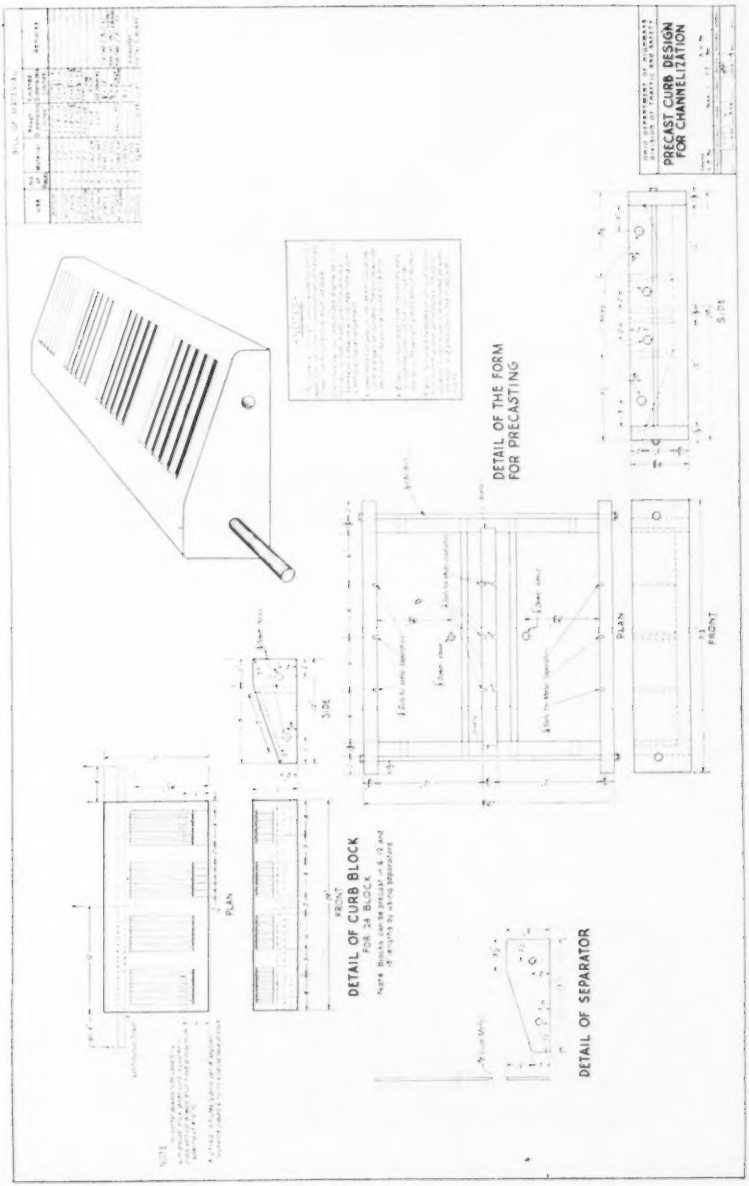
The curb, poured in 6-, 12-, 18-, and 24-inch sections, is thus adaptable both to curvilinear placement (the short sections being used for sharp curvatures), and to tangents where the greater lengths may be used. Blocks over 24 inches long were considered too heavy for easy handling and would necessitate more reinforcement.

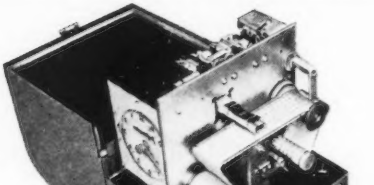
Close-up of rounded corner of channelizing island showing mortar joints between 6-inch pre-cast blocks.

Shown in the accompanying illustrations are the block and the forms for making it. Also illustrated is an installation of the channelizing blocks at the intersection of State Route 2 and State Route US 6 near the City of Sandusky, Ohio.

The pre-cast blocks were made in a Division Garage, transported to the job and installed. They are doweled to the pavement and set in a bituminous coating to cement them to the

The author is an Associate Member, I.T.E., and is Traffic Engineer with the Roane-Anderson Engineering Co. This article is reprinted from *American City* magazine. Fisher was with the Ohio Department of Highways at the time of writing this article.


PRECAST CURB DESIGN FOR CHANNELIZATION
DETAIL OF THE FORM FOR PRECASTING
DETAIL OF CURB BLOCK FOR 24 BLOCK
DETAIL OF SEPARATOR
PLAN
SIDE
FRONT



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pavement as much as possible. The joints between the blocks are filled with a concrete mortar and drainage is provided by setting in a pipe or other similar implement at the bottom of the mortar. The area back of the blocks can be filled with any material desired.

The cost of such an installation varies from $1.00 to $1.50 per lineal foot depending on the distance they have to be transported, the type of pavement they are to be installed upon, and the cost of materials and labor.

It is highly recommended that particular care be exercised in pre-casting the blocks so that concrete as dense as possible will be obtained. Vibrating the forms while pouring these blocks provides for a much greater density and consequently a much longer life.

The results of the use of this method of building channelizing islands have been very gratifying. They have withstood the shock of truck weight, and the reflecting properties of the corrugations on the face of the block provide them with good visibility at night.

TRAFFIC SIGNALS AND SIZE OF CITY

There is a wide variation among cities in each population group. For example, among the cities of 100,000 to 500,000 population one city had a signalized intersection for each 3,800 population, while at the other extreme another city had a signalized intersection for each 1,140 population. It is doubtful if the traffic conditions in the two cities warranted this wide variation in the number of signalized intersections. This wide variation prevalent among cities of all population classes indicates the need for more data to establish warrants for traffic signals.

Cities that depart radically from the average of 2,000 persons per signalized intersection might well give careful thought to the subject to determine whether their deviation from the normal is justified.

If it is assumed that the cities reporting in this study are typical of the cities in each population class then there are approximately 36,000 signalized intersections in the United States.

Author of this article is Earl Allgaier (Jun.), Traffic Research Specialist, American Automobile Association, Washington, D. C.

PERSONS PER SIGNALIZED INTERSECTION

Population Group:	Cities Reporting No.	Cities Reporting Total Pop.	Total Signalized Intersections	Persons per Signalized Intersection Mean	Minimum	Maximum
Under 10,000	33	236,105	131	1802	617	
10,000- 25,000	24	382,314	202	1893	583	
25,000- 50,000	17	612,044	374	1636	630	17,600
50,000-100,000	14	989,699	433	2286	1380	6,600
100,000-500,000	17	3,846,918	2173	1770	1140	3,800
Over 500,000	3	2,293,007	1043	2198	1420	4,900
Total	108	8,360,087	4356	1919		

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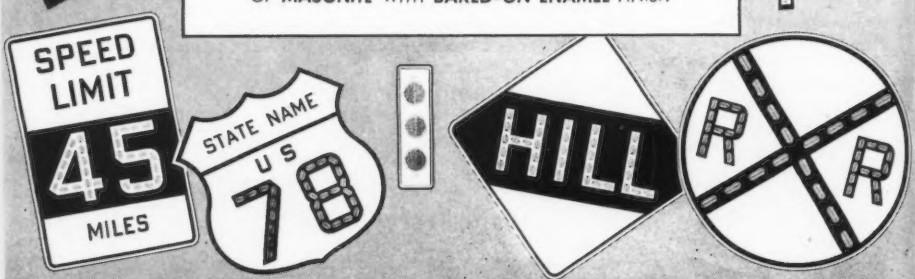

SAFETY DEVICES FOR TRAFFIC

ITE NEWS AND PERSONALS

TO ALL READERS OF TRAFFIC ENGINEERING

The new cover and larger issue are evidences that our magazine is GROWING. You can help it along by letting your friends and acquaintances know about the wealth of information obtainable through subscribing to TRAFFIC ENGINEERING.

Norman Damon, Circulation Manager, announces the beginning of a giant campaign, involving distribution of 10,000 brochures entitled "Are You Missing A Good Bet," and describing the advantages to be gained from subscribing to TRAFFIC ENGINEERING. The brochure includes statements of praise and commendation by outstanding national transportation authorities.

Don't *you* miss a Good Bet by failing to bring this publication to the attention of any State Official, Traffic Engineer, Transit Official, City Planner, Enforcement Official, City Engineer or Highway Department Employee whom you know do not now receive TRAFFIC ENGINEERING.

The Editor.

New York I.T.E. Section Meets

The November 28th meeting featured a talk illustrated with colored slides by Edmond Keenan, Traffic Engineer of the New York Tunnel Authority. His talk and the discussion following centered on the existing and future tunnels in the New York area, and their functions with regard to traffic information particularly on Manhattan.

There were 16 present including the following:

Nathan Cherniack
W. Graham Cole
John Gibala (Vice-Chairman)
Paul Green
Bruce Greenshields
Harry Koch
Theodore Matson (Chairman)
Robert Mitchell
Virden Rittgers
Henry Evans (Sec'y-Treas.)
Richard Siver
Walter Spratt
William Jaeger, Jr. (Guest)
Edmond Keenan (Guest Speaker)
Harry Hemmings
James Hayden

Chairman Matson announced that the next meeting will be held some time in January. Lt. Col. Melvin Bankhead (Mem.), on leave from his position as Traffic Engineer, County of Los Angeles, California, who was passing through New York, dropped in for a brief "hello" to the members present.

Washington, D. C., I.T.E. Section

Twenty-one members and guests attended the November 1st meeting of the Washington, D. C. Section. Informal reports on the 1944 I.T.E. annual meeting (Oct. 1-4) were made by Messrs. Marsh, Mickle, Crum, Willier, and Ricker.

Those present were:

Earl Allgaier
Louis Andriacchi
C. F. Cashell
R. W. Crum
John Ecker
M. O. Eldridge
Wm. G. Eliot
D. W. Loutzenheiser
Burton Marsh
Grant Mickle
O. K. Normann
Charles Prisk
Capt. E. R. Ricker
M. C. Stark
Peter Stupka
Capt. P. E. Taylor
Thomas Willier
W. C. Boardman, guest
J. E. Leisch, guest
H. L. Toadvine, guest

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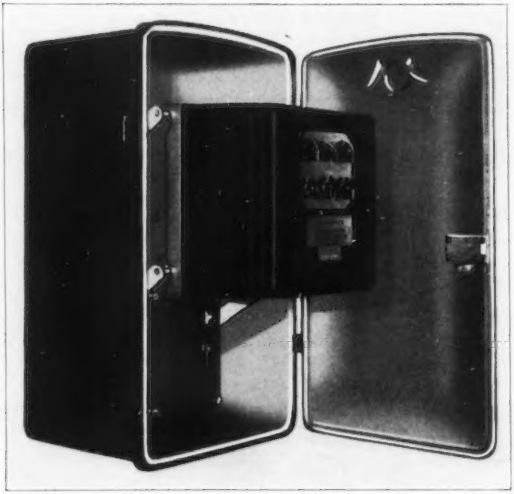

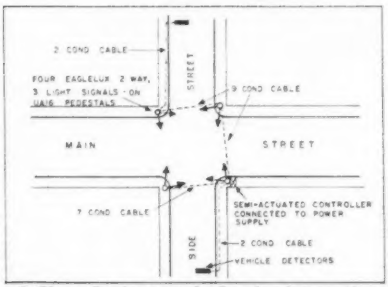

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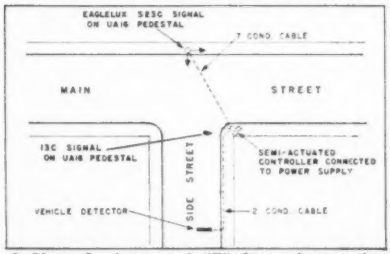

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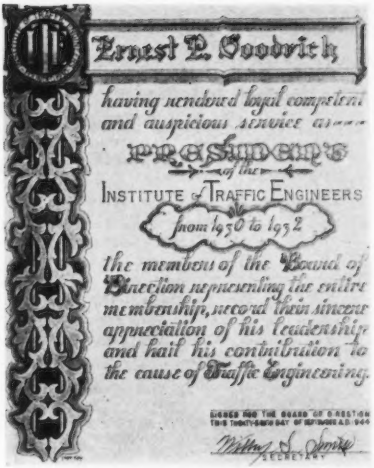

Above is a copy of the certificate presented to Ernest P. Goodrich, first president of the Institute. Certificates, measuring 15″ by 17″ and beautifully engraved and colorfully tinted were formally presented to the seven past-presidents at the annual banquet in Chicago in October. The full account appears in the October issue, page 34.

Washington, D. C., Subway System

A 56 million dollar subway system has been recommended for Washington, D. C., by J. E. Grenier Company, Baltimore, Maryland, and DeLeuw, Cather & Company, Chicago, Illinois, Consulting Engineers engaged eight months ago. The system would be a little over seven miles long using single trolley cars of the type now used on the surface tracks with connections between surface and subway.

The system would be composed of three sections radiating from a point near the White House. Other proposed construction includes an inner and outer system of belt expressways, grade separations at several key intersections, and modernization of the city's system of traffic signals.

The studies were made with the cooperation of H. C. Whitehurst, Director of Highways of the district.

New ODT Highway Department Regions

Highway Transport Department regional and district boundaries have been established and regional, district and field offices set up in Administrative Order ODT 6B.

The new set-up differs in numerous respects from the old Division of Local Transport regional organization.

Most of the boundary changes are the result of the consolidation of the nine Division of Local Transport regions into eight Highway Transport Department regions. Thirty district and field offices will be closed and 1,000 clerical workers released.

Transportation Corps Wants Traffic Engineers

Openings are now available for experienced traffic engineers to work in the European theater of operations at $6,000 per year with quarters and travel expenses furnished by the Government. Subsistence will be available at 75c per day and appointments will be made for a minimum of one year, subject to passing a physical examination. Persons interested should contact the Institute of Traffic Engineers of Major August R. Cotton, Transportation Corps, Assistant —Industrial Personnel Division, Army Service Forces, Office of the Chief of Transportation, Washington 25, D. C., for further information and application forms.

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EIGHTH NATIONAL TRAFFIC TRAINING INSTITUTE

Oregon State College, Corvallis, Oregon, will be the site of the 8th National Institute for Traffic Training, March 19 to 30, 1945. The two-week school will feature courses in Traffic Police Training, Traffic Engineering Training, Motor Fleet Administrator's Training, and High School Instructor's Training.

The Administrative Committee is composed of A. L. Strand, President of Oregon State College, Honorary Chairman; Norman Damon, (Affil.; I.T.E.), Automotive Safety Foundation, Chairman; Burton W. Marsh (Mem. I.T.E.), American Automobile Association, executive secretary; Theodore Matson, (Mem. I.T.E.) Yale University for Street Traffic Research; Lieut. Robert E. Raleigh, Northwestern University Police Training School; Donald S. Berry (Assoc. I.T.E.), National Safety Council; and Sidney J. Williams (Mem. I.T.E.), National Safety Council.

Sponsors of the Institute are:

American Automobile Association.
American Association of Motor Vehicle Administrators.
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Institute of Traffic Engineers.
International Association of Chiefs of Police.
National Safety Council.
Oregon State College.
Northwestern University Traffic Institute.
Yale University Bureau for Street Traffic Research.
Associations of Oregon - Washington - California Cities.
American Trucking Association.

PERSONALS

I. S. Shattuck (Mem.), formerly Urban Development Specialist with the National Housing Agency has resigned and is now engaged in private consulting practice, headquarters in Minneapolis.

Capt. J. J. Feuchter (Mem.), is now in Australia and has assumed new duties as Traffic Engineer for the Southwest Pacific theater of operations in General MacArthur's Headquarters. Captain Feuchter left the Proval Marshal General's School the latter part of September for a Port of Embarkation.

Major Robert S. Holmes (Assoc.), now has a new address, "Deep in the heart of Texas." The Provost Marshal General's School moved to Fort Sam Houston, San Antonio, Texas, on the first of October. Holmes reports that training facilities and weather conditions are ideally suited for the conduct of Traffic Control training.

Shortly after arriving at Fort Sam, Holmes was ordered to Washington and New York to establish a course in Traffic Safety at New York University. This course will tie in with the current Army Service Forces Safety Course being conducted each month at the Center for Safety Education. Orders have been arranged for Major Holmes to make a round-trip each month to lecture at N.Y.U.

Lt. Wortham Dibble (Assoc.), on leave, S. C. Highway Department, writes from Guinea, "Recently I was able to pick up a license plate (Jap). . . . It was a crummy piece of metal. . . . Reading the T.E. Magazine is really a nice way to partially keep in touch with the latest trends. . . Major T.E. improvements over here are made in most difficult locations. . . . Swamps without bottom predominate the scenery. . . . Since seeing Larry Hendrickson's name in the T.E. Magazine I'm glad to get the opportunity to write to him. . . . Such news as to his still being alive is gratifying."

Russell Harrison (Assoc.) formerly traffic engineer with the National Safety Council is now attached to the Army Transportation Corps as Highway Traffic Engineer and will shortly be in the European theater of operations. Thomas B. Walbert (Assoc.) of Lansing, Michigan, also has taken a similar position with the Transportation Corps and is bound for overseas.

Elroy Ericksen (Assoc.) formerly traffic engineer with the National Safety Council is now associated with the Georgia Highway Department and is located in Atlanta, Georgia.

MEMBERSHIP ELECTIONS

The following were elected to membership in the Institute of Traffic Engineers on October 1, 1944:

New Members

Harold G. Eckhardt, Assistant Chief Engineer, Division of Traffic and Safety, Ohio Department of Highways.

O. K. Normann, Senior Highway Engineer, Public Roads Administration, Washington, D. C.

New Associates

L. T. Scott-Smith, Planning Engineer, Waterbury, Connecticut.

Russell J. Newell, District Traffic Engineer, Illinois Division of Highways, Chicago, Ill.

Donald G. Manning, Assistant Traffic Engineer, Kaiser Co., Portland, Oregon.

Paul S. Robinette, Traffic Engineer, Toledo, Ohio.

J. H. Mitton, Traffic Engineer, Dept. of Vehicles and Traffic, Washington, D. C.

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Ross T. Shoaf from Junior to *Associate*.

Margaret Woolverton from Junior to *Associate*.

Wallace L. Braun from Affiliate to *Member*.

MEMBERSHIP APPLICATIONS

The following persons applied during the period September 11 to November 14, 1944.

For Admission

Chester C. Burdick, Bureau Engineer, Michigan Highway Planning Survey, Lansing, Michigan.

Grant E. Williams, Eagle Signal Corporation, Moline, Illinois.

Kenneth Vaughan-Birch, Traffic Engineer, Vancouver, British Columbia, Canada.

Herbert A. Keegan, Assistant Traffic Engineer, Traffic Engineering Division, Department of Public Safety, Newark, New Jersey.

S. Herbert Taylor, County Engineer, County of Camden, Camden, New Jersey.

For Transfer in Grade

Wayne N. Volk, Traffic Engineer, State Highway Commission, Madison, Wisconsin.

John B. Ecker, Director, Research and Planning, Capital Transit Company, Washington, D. C.

Harold F. Nunn, Safety Superintendent, E. I. du Pont de Nemours & Company, Wilmington, Delaware.

James G. Hayden, Associated Transport Inc., New York, N. Y.

Edwin F. Koester, Traffic Engineer, Wilmington, Delaware.

CALLING ALL OLD TIMERS!

Powell Needs Help Compiling Institute History

DO IT NOW—If you've forgotten what, see page 73, November issue

Eno Foundation Adds Editorial Director

Roscoe Ellard, magazine writer and Columbia University professor, is the new editorial director of the Eno Foundation for Highway Traffic Control, a research affiliate of Yale University.

The post, newly created, is based on the anticipated increase in the functions of the Foundation, according to William Phelps Eno, founder of the research group. "Our activities as a clearing house for highway traffic methods will be accelerated. Traffic planning, enforcement and road design can save immense amounts of money and productive time, as well as thousands of lives," Eno said in announcing the appointment.

N.U.T.I. Offers Administration Course

The Traffic Police Administration course offered at Northwestern University Traffic Institute and beginning February 5, 1945, offers key men in police departments an opportunity to receive comprehensive training in traffic control work at a time when such training is urgently needed.

Closing date for applications was December 1.

Officers graduated from the Traffic Institute course are prepared not only to deal with the problems involved in providing safe, rapid and efficient movement of motor vehicle traffic from the police aspects, but to coordinate their efforts with those of other interested agencies as well.

A copy of the sound - slide film "Traffic Jam Ahead" has been received at Institute Headquarters, and is available for loan to any member of the Institute upon request and payment of express charges. This film and record were developed by the National Safety Council for the Committee on Post-War Traffic Safety Planning.

The Institute of Traffic Engineers is one of the 42 organizations sponsoring the program for post-war traffic safety developed by this committee. Copies of "Danger—Traffic Jam Ahead", the 20-page printed illustrated program may be secured by writing to Institute Headquarters.

San Antonio Traffic Survey

A preliminary report on the best Interregional Highway route through the city of San Antonio is now being prepared for the State Highway Department of Texas by Michael Baker, Jr., Consulting Engineer, Planner, and Surveyor of Rochester, Pa.

To arrive at the best possible pattern for the cross-town routing of the Interregional Highway north, south, and east within the city, the Baker Engineers are busy analyzing San Antonio's traffic problems. At the same time they are carefully preserving all of the city's existing characteristics. The report is also taking into consideration a part of the city's comprehensive planning program, determining highway routes from the viewpoint of property damage and the economics of the business and trade areas, both within and outside the city.

Stanton C. Funk, who has been transferred from Pittsburgh's $25,000,000 Penn-Lincoln Parkway project, a design and survey contract being prepared by the Baker Engineers, is Project Engineer in charge of the San Antonio job. A competent staff of Baker men is assisting him. This staff includes a highway engineer, planning expert, traffic engineer, and bridge designer, as well as other key men.

Origin and destination counts and volume counts of the complex flow of traffic into and out of San Antonio are being directed and evaluated by A. N. McCandliss, Traffic Engineer (Jun. Mem. I.T.E.). Experts from the Planning Division of the Michael Baker, Jr., firm are at the same time studying past and existing conditions in the city which might have a bearing on this Interregional Highway route.

Structural studies involved in this report are being handled by George S. Richardson, consulting engineer and outstanding authority on structural design, who is also associated with Michael Baker, Jr., on the Penn-Lincoln Parkway project.

Syracuse Transportation Study

A Transit Commission soon to be appointed by Mayor Kennedy will make an exhaustive study of the entire transportation system of Syracuse, New York. William F. Kavanaugh, City Lighting - Traffic Engineer is slated to be Secretary of the Commission.

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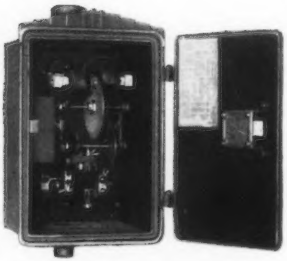
WRITE TODAY

WARNING...



Type TSS18 Flasher

Type TST111D Signal and Sign

REDUCE THOSE ACCIDENT HAZARDS!

Type TST111D is a flashing signal equipped with an auxiliary reflector and receptacle for illuminating an information or warning sign mounted on the signal supporting post. The auxiliary reflector accommodates a 100-watt lamp and gives excellent illumination of a 24" x 24" sign.

A glass cover is furnished on the sign light to protect the lamp and reflector. Mounting of the signal is by means of a 2" slipfitter which is cast integral with the auxiliary reflector.

Type TSS18 flasher provides for flashing the signal, while the sign light is on continuously.

CROUSE - HINDS COMPANY

SYRACUSE 1, NEW YORK, U.S.A.

RETIRING A.A.A. PRESIDENT HENRY HONORED

A testimonial banquet, honoring his twenty-one years as President of the American Automobile Association, was tendered Thos. P. Henry of Detroit on November 20, 1944, at the Palmer House in Chicago during its forty-second Annual Meeting.

I.T.E. President Hammond sent the following letter to be incorporated in a bound volume of testimonial letters from highway, transportation, traffic and safety leaders presented to Mr. Henry.

Dear Mr. Henry:

On behalf of the officers, Board of Direction, and members of the Institute of Traffic Engineers, I wish to extend our congratulations to you on your 21st anniversary as President of the American Automobile Association.

During your administration and under your active and conscientious leadership, the American Automobile Association has contributed in an outstanding manner to the improvement of highway transportation. Through this contribution you and your Association have rendered a real service to the nation and the American motorist.

Your early recognition of the importance of traffic engineering as a major factor in highway transportation and your establishment of a Traffic Engineering Department in the Association, have exercised a strong influence on the development of our profession.

As we look forward to post-war days, we recognize that many major traffic problems will be centered in urban areas throughout the country and that the American Automobile Association through its leadership and through its many state and local affiliations, can focus attention on these problems and aid materially in their solution.

We highly commend you for the outstanding accomplishments under your administration and believe that you should feel justly proud of the personal part which you played in these developments.

Sincerely yours,

HAROLD F. HAMMOND, *President*,
Institute of Traffic Engineers

Mr. Henry retired as AAA President and Henry J. Brunnier, widely known engineer of San Francisco, was unanimously elected President.

INSTITUTE ACTIVITIES TEN YEARS AGO

Items taken from the December, 1934, issue of Traffic Engineering

Uniform Code Available

The Uniform Motor Vehicle Code in five acts, together with the Model Traffic Ordinance, has been published in final form. The various acts of the Code were formulated by the Fourth National Conference on Street and Highway Safety, held in Washington, D. C., May 23 to 25, 1934; at the same time were drawn up model municipal traffic ordinances and state legislation which will be necessary to make the Code effective.

The First Traffic Signal

The magazine *Time* has published an interesting historical sketch of traffic signals in its letter supplement, Nov. 26, 1934. Reference is made to the work of the Institute as follows:

"For practical purposes, however, many engineers agree that the present traffic light system was born exactly 20 years ago in Cleveland. That is the finding of the Committee on Evolution of the Art of Traffic Control and Regulation, of the I.T.E. The Cleveland signal was installed Aug. 5, 1914, at Euclid Avenue and 105th Street. It consisted of red and green lights operated by a policeman in a booth. Few months later it was abandoned as "unnecessary". Next installation on record was at Salt Lake City, 1916. New York followed, March 1920, with its first tower at 5th Avenue and 42nd Street."

The report of the Committee on Evolution of the Art of Traffic Control and Regulation appeared in the Third Annual Proceedings.

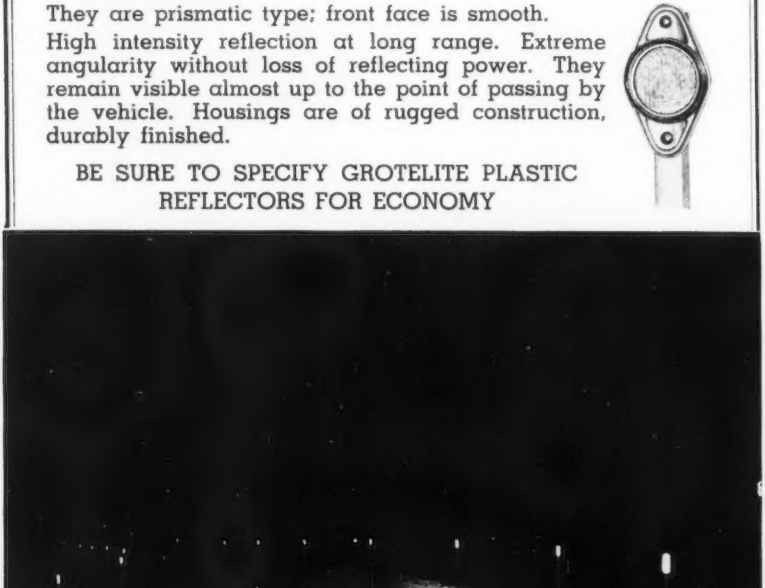
PLAN TODAY
To Use GROTELITE
PLASTIC REFLECTORS ON TOMORROW'S HIGHWAYS

These sturdy roadside delineators are equipped with the new Grotelite plastic reflector.

They are prismatic type; front face is smooth.

High intensity reflection at long range. Extreme angularity without loss of reflecting power. They remain visible almost up to the point of passing by the vehicle. Housings are of rugged construction, durably finished.

BE SURE TO SPECIFY GROTELITE PLASTIC REFLECTORS FOR ECONOMY



The Grotelite Co., Inc.

Bellevue, Kentucky

Bay City Routes Traffic

A one-way traffic system for State and Federal Highways through Bay City's (Michigan) business district has been established by Ronald McGillivray, City Planning and Traffic Engineer. By eliminating turning movements, congestion has been reduced, particularly conflicts with pedestrians.

Also traffic has been improved in the down-town area through establishment of special routes for heavy trucks and oil transport trucks around Bay City. The city has cooperated with the Michigan State Highway Department in designing routes to connect the different State and Federal Highways entering the city. Maintenance agreements have been made, and the State Highway Department has very efficiently posted these routes.

Highways Head Post-War Construction Plans

The American Society of Civil Engineers' Committee on Post-War Construction reports that construction plans reported as of May 31, total $2,655 million with highway and bridge plans totalling $1,036 million. The A.S.C.E. Committee on Post-war Construction woud like to see advance plans engineered for 10 billion in public and private construction during the first three post-war years.

Parking Meters—A thirty - page mimeographed report on Parking Meters in Pennsylvania municipalities has just been released by the Institute of Local Government, State College, Pennsylvania. The report discusses parking meters in general and then goes into the direct data regarding meters in Pennsylvania municipalities.

Approximately 200,000 parking meters are now operating in 449 cities in the United States, according to the National Safety Council.

Freeways Sketches Comments

A summary has been prepared of comments received from 200 city planners, traffic engineers, and highway officials, regarding a set of sketches showing the incorporation of transit facilities into urban freeways, designed and distributed recently by Leslie Williams, American Transit Association City Planning Engineer.

Copies of the comment summary or the sketches may be obtained by writing Leslie Williams.

Traffic Accidents In England

The total of traffic deaths and injuries in Great Britain since the war began is 588,742, while the casualties in killed, wounded and prisoners of the war totaled 387,996. 39,877 were killed on the roads in traffic accidents and 120,900 on the fighting front. These figures were compiled several months before the invasion.

Postwar Auto—"A lot of post-war planners ask: 'What is the post-war automobile going to look like?' I don't know. We are too busy with war work to worry about it. The only think I know is that if we keep competitive business, you and I will have the best of everything that the world can produce, whether it is automobiles, radios, or whatever you want." —*Charles F. Kettering, Vice-president of General Motors.*

LOOKING AHEAD

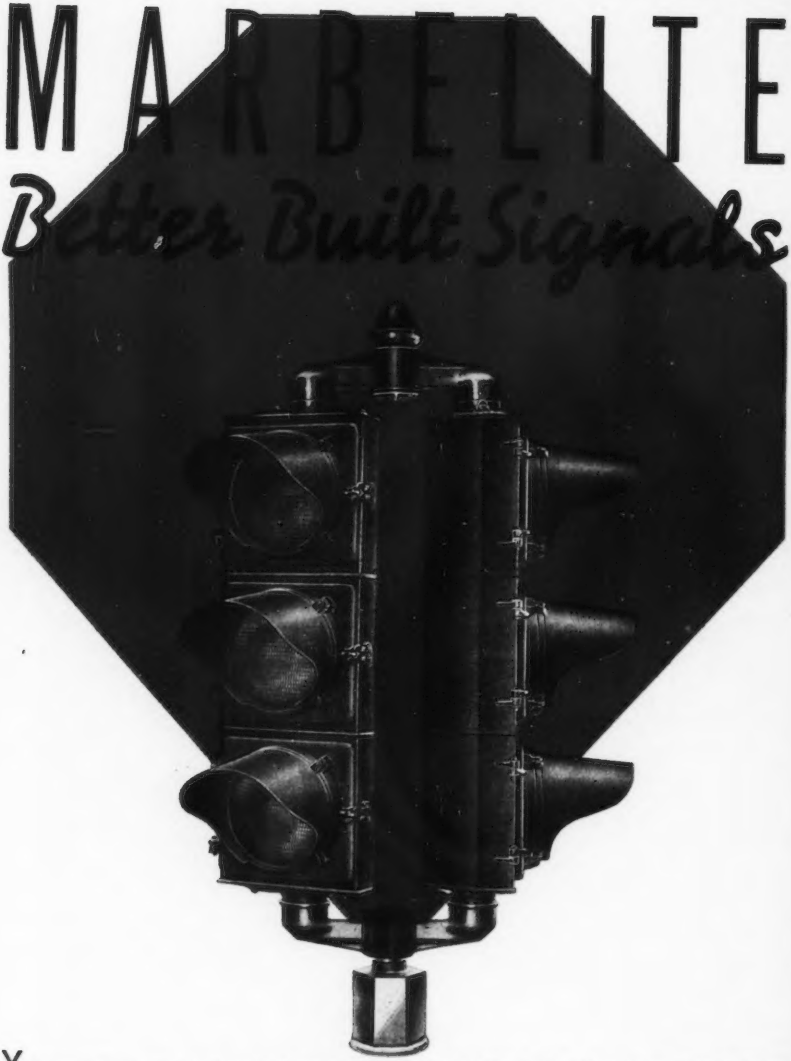
AMERICAN ROAD BUILDERS' ASSOCIATION, 42nd Annual Meeting, Stevens Hotel, Chicago, Ill., January 16-19, 1945.

AMERICAN SOCIETY OF CIVIL ENGINEERS, 92nd Annual Meeting, New York City, January 17-19, 1945.

SEVENTEENTH ANNUAL SOUTHERN SAFETY CONFERENCE, Winston-Salem, N. C., March 18-20, 1945.

MARBELITE

Better Built Signals



YOU can determine by just looking at this advanced design of a Two Way, Three-Color adjustable Signal that it is BETTER-BUILT.

Note the reinforced aluminum mounting brackets that replace the conventional pipe and fitting assembly. A compact, sturdy arrangement, eliminating small, minor parts.

You bet! It is BETTER-BUILT quality.

That isn't all, but it gives an idea of why Marbelite Signals are approved by numerous State and City Traffic Departments as well as Traffic Associations, and why there are so many thousands of Marbelite Signals in use in these Cities and States.

Familiarize yourself with other Marbelite features, such as the unbeatable optical unit. You will be proud to have such fine quality Signals regulating traffic in your community.

THE MARBELITE COMPANY, INC.

26 WARREN STREET **NEW YORK 7, N. Y.**